

First Grade Science Scope & Sequence 2023-24

Ongoing TEKS:

- 1.1A - Identify, discuss, and demonstrate safe and healthy practices as outlined in Texas Education Agency-approved safety standards during classroom and outdoor investigations, including wearing safety goggles or chemical splash goggles, as appropriate, washing hands, and using materials appropriately
- 1.1(B) identify and learn how to use natural resources and materials, including conservation and reuse or recycling of paper, plastic, and metals
- 1.2A - Ask questions about organisms, objects, and events observed in the natural world.
- 1.2B - Plan and conduct simple descriptive investigations
- 1.2C - Collect data and make observations using simple tools.
- 1.2D - Record and organize data using pictures, numbers, and words.
- 1.2E - Communicate observations and provide reasons for explanations using student-generated data from simple descriptive investigations.
- 1.4A - Collect, record, and compare information using tools, including computers, hand lenses, primary balances, cups, bowls, magnets, collecting nets, notebooks, and safety goggles or chemical splash goggles, as appropriate; timing devices; non-standard measuring items; weather instruments such as demonstration thermometers and windsocks; and materials to support observations of habitats of organisms such as aquariums and terrariums.

First Nine Weeks

Introduction: Science as Inquiry

1.3 Scientific investigation and reasoning. The student knows that information and critical thinking are used in scientific problem solving.

- 1.3(A) identify and explain a problem and propose a solution
- 1.3(B) make predictions based on observable patterns
- 1.3C Describe what scientists do.

Investigating Properties and Patterns of Objects:

1.4 Scientific investigation and reasoning. The student uses age-appropriate tools and models to investigate the natural world.

- 1.4B Measure and compare organisms and objects using non-standard units.

1.5 Matter and energy. The student knows that objects have properties and patterns.

- 1.5A Classify objects by observable properties such as larger and smaller, heavier and lighter, shape, color, and texture.
- 1.5B Predict and identify changes in materials caused by heating and cooling.
- 1.5C Classify objects by the materials from which they are made.

Second Nine Weeks

Investigating Energy:

1.6 Force, motion, and energy. The student knows that force, motion, and energy are related and are a part of everyday life.

- 1.6(A) identify and discuss how different forms of energy such as light, thermal, and sound are important to everyday life

Investigating How Objects Move:

1.6 Force, motion, and energy. The student knows that force, motion, and energy are related and are a part of everyday life.

- 1.6(B) predict and describe how a magnet can be used to push or pull an object
- 1.6(C) demonstrate and record the ways that objects can move such as in a straight line, zig zag, up and down, back and forth, round and round, and fast and slow

Investigating Weather and Seasons:

1.8 Earth and space. The student knows that the natural world includes the air around us and objects in the sky

- 1.8(A) record weather information, including relative temperature such as hot or cold, clear or cloudy, calm or windy, and rainy or icy
- 1.8(D) demonstrate that air is all around us and observe that wind is moving air

Third Nine Weeks

Objects in the Sky:

1.8 Earth and space. The student knows that the natural world includes the air around us and objects in the sky.

1.8 (B) observe and record changes in the appearance of objects in the sky such as the Moon and stars, including the Sun

1.8(C) identify characteristics of the seasons of the year and day and night

Rocks, Soil, and Water:

1.7 Earth and space. The student knows that the natural world includes rocks, soil, and water that can be observed in cycles, patterns, and systems.

1.7(A) observe, compare, describe, and sort components of soil by size, texture, and color

1.7(B) identify and describe a variety of natural sources of water, including streams, lakes, and oceans

1.7(C) identify how rocks, soil, and water are used to make products

Investigating Organisms and Environments:

1.9 Organisms and environments. The student knows that the living environment is composed of relationships between organisms and the life cycles that occur

1.9(A) sort and classify living and nonliving things based upon whether they have basic needs and produce offspring

1.9(B) analyze and record examples of interdependence found in various situations such as terrariums and aquariums or pet and caregiver

1.9(C) gather evidence of interdependence among living organisms such as energy transfer through food chains or animals using plants for shelter

Fourth Nine Weeks

Investigating Characteristics of Organisms:

1.10 Organisms and environments. The student knows that organisms resemble their parents and have structures and processes that help them survive within their environments

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1.10(A) investigate how the external characteristics of an animal are related to where it lives, how it moves, and what it eats

1.10(B) identify and compare the parts of plants

1.10(C) compare ways that young animals resemble their parents

Life Cycles:

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1.10(D)) observe and record life cycles of animals such as a chicken, frog, or fish